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EXAMINER

CIRIC, LJILJANA V

ART UNIT PAPER NUMBER

3753

DATE MAILED: 01/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,533

Applicant(s)

BURK ET AL.

Examiner

Ljiljana (Lil) V. Ciric

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2003 and 18 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5-7, 11, 15, 18 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-10, 12-14, 16, 17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s): _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the amendments and arguments filed on March 7, 2003, August 11, 2003, and November 18, 2003.
2. Claims 1 through 20 remain in the application, all as amended via one of the aforementioned amendments. Of these, claims 5 through 7, 11, 15, 18, and 20 remain withdrawn from consideration as being drawn to non-elected inventions.

Response to Arguments

3. Applicant's arguments filed on March 7, 2003 have been fully considered but they are not persuasive.

It is respectfully noted, that contrary to applicant's argument that the claims are now clearly in compliance with 35 U.S.C. 112, second paragraph, at least some of the claims still contain significant indefiniteness problems as specified in greater detail in the corresponding rejections below.

For example, contrary to applicant's argument that the *Ueda* reference fails to disclose or suggest a refrigerant/coolant heat exchanger upstream in series on the coolant side to the supply air/coolant heat exchanger "disposing the supply air channel" [sic], *Ueda* most specifically discloses a supply air/coolant heat exchanger 17 disposed in a ventilation duct 14, with a refrigerant/coolant heat exchanger 15 connected upstream in series on the coolant side to the supply air/coolant heat exchanger 17 via coolant passageway 22. See Figure 2 of *Ueda*, as well as the corresponding prior art rejection as repeated below.

Also, in response to applicant's argument that neither *Ueda* nor *Tanaka et al.* discloses a drying mode of operation, it is hereby noted that not only is drying (i.e., dehumidification) inherently performed by air conditioners during operation thereof, but the *Tanaka et al.* reference even explicitly discloses a dehumidifying mode of operation. Furthermore, no distinguishing structure corresponding to the drying

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mode is recited in the examined apparatus claims of the instant application. Applicant is thus also respectfully reminded that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959).

Also, "[A]pparatus claims cover what a device *is*, not what a device *does*. (Emphasis in original).

Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Applicant's arguments regarding the applicability of the *Ueda* reference relative to claims 1, 16, and 20 have been considered but are rendered moot by the fact that none of these claims have been rejected as being anticipated by this reference, and that claim 20 furthermore remains withdrawn from consideration and is an unexamined claim.

Additionally, in response to applicant's argument that the *Ueda* reference fails to show certain features of applicant's invention as recited in rejected claim 19, it is noted that the features upon which applicant relies (i.e., a drying operating mode) are not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the *Tanaka et al.* reference fails to show certain features of applicant's invention as recited in the rejected claims, it is noted that the features upon which applicant relies (i.e., a using internal combustion engine exhaust gases in an exhaust gas coolant heat exchanger) represent an intended use limitation in the claims, but it is hereby noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

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It is furthermore noted by the examiner that the claims of the instant invention fail to positively recite either an internal combustion engine or a passage for exhaust gases per se or even a heat exchanger operably connected to an internal combustion engine, and that the material worked upon by an apparatus (i.e., the engine exhaust gases in the instant case) generally do not impart patentability to an apparatus claim. What is more, as an aside, however, it is also noted that during operation in traffic, internal combustion engine exhaust gases from at least other vehicles will inherently mix in with the air flowing through the face of radiator 136 (which is broadly readable on the internal combustion engine exhaust gas/coolant heat exchanger as recited in the claims of the instant application).

Also, in response to applicant's argument that the *Tanaka et al.* reference fails to show certain features of applicant's invention as recited in rejected claim 16, it is noted that the features upon which applicant relies (i.e., an air/coolant heat exchanger arranged in an air feeding duct for the vehicle occupant interior) are not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments regarding the applicability of the *Tanaka et al.* reference relative to claims 8 and 10 have been considered but are rendered moot since these two claims are no longer rejected as being anticipated by *Tanaka et al.*

In conclusion, applicant is also respectfully reminded that claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Applicant's arguments thus fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments thus also do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art

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disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Election/Restriction

4. This application contains claims 5 through 7, 11, 15, 18, and 20 drawn to inventions nonelected with traverse in Paper No. 7. A complete reply to the final rejection **MUST** include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Drawings

5. Upon reconsideration in view of applicant's arguments filed on March 7, 2003, the examiner hereby withdraws the objections to the drawings as cited in the previous Office action.

Specification

6. Receipt and entry of the amended abstract as filed on March 7, 2003 is hereby acknowledged.

Claim Objections

7. Claims 4, 10, 14, and 16 through 19 are objected to because of the following informalities, for example: "high pressure-sided" [claim 4, line 2; claim 10, line 2; claim 14, line 2] should be replaced with "high pressure side" for improved clarity and grammatical correctness; and, "an air conditioning mode" [claim 16, line 20; claim 19, lines 7-8; claim 19, lines 13; claim 19, line 17] should be replaced with "the air conditioning mode" for improved clarity and readability. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2, 3, 8 through 10, 13, 17, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The above cited claims are still generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document.

More particularly, with regard to claim 2 as amended, it is not clear whether or not the reheat operating mode recited in lines 3-4 is the same reheat operating mode as previously recited in the limitation "at least one of a heat pump operating mode and a reheat operating mode" as recited in lines 3-4 of claim 1 from which claim 2 depends, thus rendering claim 2 indefinite with regard to the metes and bounds of protection sought. Furthermore with regard to claim 2 as amended, it is not clear to which of the above reheat operating modes the limitation "*this* reheat operating mode" as cited in each of lines 6-8 refers.

With regard to claim 3 as amended, the limitations "a three way valve having a first connection with a fourth connection of the four way valve, a second connection to the refrigerant cooler, and a third connection to the refrigerant/coolant heat exchanger" are unclear as written, rendering the claim generally incomprehensible and indefinite. Claims 9 and 13 contain the same limitations and are similarly unclear and indefinite as amended.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 8 as amended recites the broad recitation of "at least one

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of a heat pump operating mode and a reheat operating mode," and the claim also recites the at least one operating mode as including "a reheat operating mode" which is the narrower statement of the range/limitation, thus rendering indefinite claim 8 and all claims depending therefrom. Claim 19 contains the same set of limitations and is similarly rendered indefinite thereby.

It is not clear to which of the previously recited operating modes the limitation "this operating mode" [claim 17, line 9] refers, thereby further rendering the claim indefinite.

The above is an indicative, but not necessarily an exhaustive, list of 35 U.S.C. 112, second paragraph, problems. Applicant is therefore advised to carefully review all of the claims for additional problems. Correction is required of all of the 35 U.S.C. 112, second paragraph problems, whether or not these were particularly pointed out above.

Claim Rejections - 35 U.S.C. § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. As best can be understood in view of the indefiniteness of claims 8, 10, and 19, claims 8, 10, 12, 14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Ueda (previously of record)*.

Ueda discloses a vehicular air conditioner essentially as claimed, including a compressor 1, a refrigerant cooler 3, a supply air/refrigerant heat exchanger 4 disposed in a supply air channel 10, a coolant cycle including a refrigerant/coolant heat exchanger 15 and a supply air/coolant heat exchanger 17 disposed in a ventilation duct 14, various refrigerant flow control valves such as four-way valve 2, an accumulator 9, and check valves 7 and 8. Note that the refrigerant/coolant heat exchanger 15 is connected upstream in series on the coolant side to the supply air/coolant heat exchanger 17 via coolant

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passageway 22. Generally, little or no patentable weight is given to functional or intended use limitations in the apparatus claims, as appropriate.

The reference thus reads on the claims.

12. Alternately for claims 12 and 14, claims 1, 4, 12, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by *Tanaka et al* (previously of record).

Tanaka et al. discloses a vehicular air conditioner essentially as claimed, including a compressor 122, a refrigerant cooler 112, a supply air/refrigerant heat exchanger 111 disposed in a supply air channel 100, a coolant cycle including a refrigerant/coolant heat exchanger 132 and a heat exchanger or radiator 136 which reads broadly on the internal combustion engine exhaust gas/coolant heat exchanger as claimed in the instant application, a heat generating component or heating part 133, various refrigerant flow control valves such as four-way valve 123, an accumulator 250, and, check valves 129a, b, and e. Furthermore, the heat exchanger or radiator 136 (which is broadly readable on the internal combustion engine exhaust gas/coolant heat exchanger) is connected upstream in series to the refrigerant/coolant heat exchanger 132 is connected upstream in series in the coolant cycle or in the coolant circuit 138. See Figure 24, for example. The vehicular air conditioner of *Tanaka et al.* is operable in a dehumidifying or drying mode. Generally, little or no patentable weight is given to functional or intended use limitations in the apparatus claims, as appropriate.

The reference thus reads on the claims.

NOTE: Applicant cannot rely upon the foreign priority papers to overcome the immediately preceding rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

13. The non-application of art against claims 2, 3, 9, 13, and 17 should not be construed as an indication that the claims contain allowable subject matter but rather that the claims still could not be examined on the merits due to indefiniteness.

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Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925. While she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric may generally be reached at the Office during the work week between the hours of 10 a.m. and 6 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel, can be reached on (703) 308-1272. The NEW central official fax phone number is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

January 18, 2004


LJILJANA V. CIRIC
PRIMARY EXAMINER
ART UNIT 3753